

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
18 August 2005 (18.08.2005)

PCT

(10) International Publication Number
WO 2005/074919 A1

(51) International Patent Classification⁷: **A61K 31/4025**,
31/155, 31/195, C07D 207/26, 211/98, 401/12, 403/12,
215/00, A61P 19/00, 21/00

Kerstin, Ingalill [SE/SE]; Kungsörnsgratan 24, S-215 61
Malmö (SE). SUNDSTEDT, Åsa, Anette [SE/SE]; Södra
Promenaden 39 B, S-211 38 Malmö (SE).

(21) International Application Number:
PCT/SE2005/000054

(74) Agent: AWAPATENT AB; Box 5117, S-200 71 Malmö
(SE).

(22) International Filing Date: 19 January 2005 (19.01.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/541,231 4 February 2004 (04.02.2004) US
0400213-5 4 February 2004 (04.02.2004) SE

(71) Applicant (for all designated States except US): **ACTIVE
BIOTECH AB** [SE/SE]; Scheelevägen 22, P.O. Box 724,
S-220 07 Lund (SE).

(72) Inventors; and

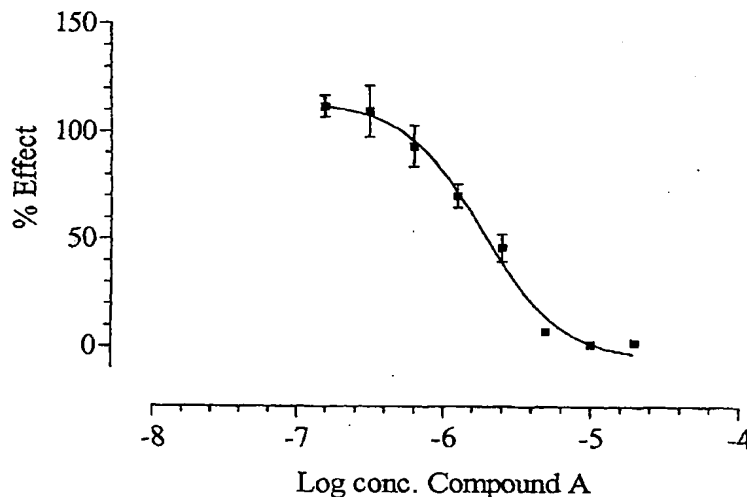
(75) Inventors/Applicants (for US only): **ABRAMO, Aina**,
Lisbeth [SE/SE]; Järavallsvägen 30, S-237 33 Bjärred
(SE). **PETTERSSON, Lars, Olof, Göran** [SE/SE];
Möllebacken 8, S-226 50 Lund (SE). **ANDERSSON,**

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO,

[Continued on next page]

(54) Title: DIUREA DERIVATIVES



(57) Abstract: The present invention relates to novel diurea derivatives that block intracellular signal transduction and thereby inhibit the production of pro-inflammatory cytokines, especially interleukin-2 (IL-2) and/or induce apoptosis in activated T-cells. It further discloses such a compound for use as a medicament, the use of said compound for the manufacturing of a medicament for the treatment of immune disorders which benefit from inhibition of production of IL-2 and other pro-inflammatory cytokines and/or induction of apoptosis in activated T-cells, a pharmaceutical composition comprising said compound and a method of treatment comprising administration of a pharmaceutically effective amount of said compound. A compound of the general formula I.

WO 2005/074919 A1

WO 2005/074919 A1



SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:

— *with international search report*